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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,361

07/13/2004

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112740-988

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29177 7590 06/11/2007
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EXAMINER

SAINT CYR, LEONARD

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

06/11/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,361	Applicant(s) AUBAUER ET AL.	
	Examiner Leonard Saint-Cyr	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claim 12 – 18, and 20 are objected to because of the following informalities:

In claims 12 – 18, replace “ claim 1” by – claim 11 -.

In claim 20, replace “ claim 9” by – claim 19 -.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11 – 16, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Meucci, Jr (US Patent 6,038,330).

As per claims 11, and 19, Meucci, Jr teaches a virtual assistant comprising:

a data terminal; at least two electroacoustic converters; (“computer 96”; col.10, line 35);

and at least one other sound source (“discern the location and direction of movement objects such as motor vehicles”; col.1, lines 27 – 29);

said at least two electroacoustic converters being driven such that the virtual assistant can be spatially positioned by a data terminal user to achieve acoustic

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separation between the electrostatic converters and at least one other sound source (“discern the location and direction of movement objects such as motor vehicles”; col.1, lines 27 – 29; col.3, lines 48 - 59).

As per claim 12, Meucci, Jr further discloses that the spatial positioning of the virtual assistant is achieved by targeted signal processing of the sound information from the data terminal (“ spatial positioning of one of the transducers relative to the head of the listener”; col.10, lines 48 – 54).

As per claim 13, Meucci, Jr further discloses the virtual assistant can be positioned by the user to be located in the vicinity of the user's head and behind one of the user's shoulders (“a position behind listener...position to the side of listener”; col.9, lines 28 – 35).

As per claim 14, Meucci, Jr further discloses that the spatial positioning of the virtual assistant can be preset (col.9, lines 1 – 26).

As per claim 15, Meucci, Jr further discloses that an electromechanical input device for receiving user input to set the positioning of the virtual assistant can be set by means of an electromechanical input device (“mechanicalacoustic”; col.4, lines 6 – 9).

As per claim 16, Meucci, Jr further discloses positioning of the virtual assistant can be set by means of voice commands ("mechanicalacoustic"; col.4, lines 6 – 9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meucci, Jr (US Patent 6,038,330).

As per claim 17, Meucci, Jr does not specifically teach that the positioning of the virtual assistant can be set by means of inputs entered on a touch-sensitive display unit.

However, the examiner takes official notice that an artisan at the time of invention would have known to set the position of the virtual assistant by touch-sensitive display.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use touch-sensitive screen in Meucci, Jr, because that would make the system more flexible, so that it can be more convenient to users.

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meucci, Jr (US Patent 6,038,330) in view of Sibbald (US PAP 2003/0185403).

As per claim 18, Meucci, Jr does not specifically teach data terminal comprises mobile data terminals.

Sibbald teaches providing ambient acoustic noise-reduction in mobile or cellular phones (paragraph 11, lines 1 – 3).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the invention in cellular phones as taught by Sibbald in Meucci, Jr, so that listener can perceive the transmitted sounds more effectively in a noisy environment (paragraph 11, lines 3 – 5).

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meucci, Jr (US Patent 6,038,330) in view of Curry et al., (US PAP 2003/0081115).

As per claim 20, Meucci, Jr does not teach a head position sensor which records the head movements of the data terminal user; and taking into account the user's head movements while processing the signals containing the audible information in such a way that the selected spatial position of the apparent source of the audible information remains unchanged relative to the user's head even if the user's head moves.

Curry et al., teach that the remote participant station includes a head-tracking sensor for detecting movements of a remote participant such as the pan and tilt of a remote participant's head (paragraph 26, lines 1 – 5).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to detect head movements as taught by Curry et al., in Meucci, Jr, because that would greatly increase the spatialization ability of a remote participant (paragraph 26, lines 17 – 19).

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ishii (US PAP 2001/0021257) teaches a stereophonic sound field reproducing apparatus

Aarts (US PAP 2003/0190047) teaches headphones with integrated microphones.

Moorthy (US PAP 2004/0013271) teaches a method and system for recording and reproduction of binaural sound.

Ballas (US PAP 2003/0059070) teaches a method and apparatus for producing spatialized audio signals.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard Saint-Cyr whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS
06/04/07



RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER